

09/702,318  
Art Unit 3712  
Docket 9028

#### REMARKS

This Amendment is submitted in response to the Office Action mailed on April 7, 2004. Claims 1 - 8 and 10 - 18 are pending. Claim 13 is allowed, and claims 6, 8, 14, and 15 would be allowable if objections are overcome. It is believed that this Amendment overcomes the objections.

The other claims are rejected.

#### Response to Objections

##### Claim 3

It is believed that amendment to claim 3 overcomes the objections.

In response to the term "path" in that claim, Applicant points out that the Specification, near its end, in "Additional Consideration" number 4, provides an example of the "path":

4. Assessment of the student's current status was discussed above. One element which can be used in the assessment can be a trace of the **student's path** through the materials presented by the professor. Such a trace is commonly called a "clickstream."

For example, if a student in a Chemistry course repeatedly returns to a lesson which explains the concept of Avogadro's number, it may be assumed that the student is weak in that concept, and that remedial teaching is required in that, or a related, topic.

Thus, as Consideration number 4 points out, the student's

09/702,318  
Art Unit 3712  
Docket 9028

"clickstream" can form a path. "Clickstream" is well known industry jargon for the trail of mouse clicks left by a person. Those clicks indicate the menu choices made by the person.

Further, the rejection is based on the ground that it is not seen how the term "path" further limits the parent claim. Applicant points out that there is no requirement that every term in a dependent claim further limit the parent claim.

#### Claim 6

Claim 6 would be allowable if re-written in independent form, and that has been done.

#### Claims 8, 14, and 15

These claims were rejected on the grounds that it is supposedly not clear whether the claimed "means" refer to means as defined in section 112.

Applicant hereby stipulates that the "means" in these claims are means as defined in 35 USC § 112.

#### **Response to Rejection of Claims 1 - 5, 7, and 10**

These claims were rejected as obvious, based on Siefert and Ziv-El. Claim 1 recites:

1. In a method of presenting educational lessons on a display, the improvement comprising:

- a) making an assessment of the educational standing of a person utilizing the display;
- b) selecting a list of lessons available;
- c) based on the assessment, identifying lessons available to the person and displaying corresponding icons on the display; and
- d) accepting selection of an icon from the person, and presenting the chosen lesson.

Claim Elements not Shown in References

POINT 1

A basic problem is that the **actual elements** of claim 1 have not been shown in the references. MPEP § 2143.03 states:

To establish prima facie obviousness . . . **all the claim limitations** must be taught or suggested by the prior art.

For example, the Office Action, end of page 3, states:

Ziv-El discloses . . . delivering lessons to a user whereby the user can access a list of available lessons based on the educational standing of the user by pressing button 163, and then selecting one of the lessons to work on.

However, this characterization of Ziv-El does not correspond to claim 1, as will now be shown.

Claim 1 recites, inter alia:

- . . .
- a) making an assessment of the educational standing of a person utilizing the display;
  - b) selecting a list of lessons available;
  - c) based on the assessment, identifying lessons available to the person and displaying corresponding icons on the display;
- . . .

As the preceding passage from claim 1 shows, claim 1 recites two groups of lessons:

- 1) those on the "list" of claim 1(b), and
- 2) those "identified" in claim 1(c).

These two groups of lessons have not been shown in Ziv-El, nor Siefert. At best, Ziv-El, as characterized by the PTO, shows a single group of available lessons.

Thus, the elements recited in claim 1(a), (b), and (c) have not been shown in the references, as required by the MPEP section cited above.

#### POINT 2

In addition,

- 1) the "assessment,"
- plus
- 2) the use of that assessment in identification of which lessons to make

09/702,318  
Art Unit 3712  
Docket 9028

available to the student,  
has not been shown in the applied references.

Some type of "assessment" may be shown in Siefert. But the **claimed** assessment, plus its particular use in selecting lessons, is absent from Siefert. Thus, the claimed assessment has not been shown in the references, contrary to the MPEP section cited above.

No Connection Shown Between Elements Combined in References

This absence raises a second problem. The Office Action relies on Siefert (not Ziv-El) to show the "assessment." However, no connection has been made between any assessment in Siefert and any selection of lessons in Ziv-El.

That is, claim 1(c) states that the "assessment" is used to "[identify] lessons . . . and [display] corresponding icons." But if that "assessment" is shown in Siefert, then where is the connection, or carryover, into Ziv-El, which is cited to show claim 1(b) and (c) ?

Without a showing of a connection, the rejection cannot stand.

From another perspective, MPEP § 706.02(j) states:

Contents of a 35 U.S.C. 103 Rejection

. . .

To establish a prima facie case of obviousness, three basic criteria must be met.

. . .

Second, there must be a reasonable expectation of success.

. . .

The teaching or suggestion to make the claimed combination **and the reasonable expectation of success must both be found in the prior art** and not based on applicant's disclosure.

To show an "expectation of success," the PTO must show some connection between the "assessment" of Siefert and Ziv-El, and how that connection leads to claim 1. That is, the PTO must show **how Siefert's assessment is used to select the Ziv-El's lessons, as in claim 1.**

That has not been done.

**No Teaching Given for Combining References**

The Office Action, page 3, lines 1 - 5, combines the "list" of Ziv-El with Siefert, on the grounds that it is obvious

. . . to modify . . . Siefert by providing a list of appropriate lessons from which a user may select one . . .

The Office Action continues, and gives a reason for adding the list

09/702,318  
Art Unit 3712  
Docket 9028

to Siefert:

. . . for the purpose of allowing the user to choose from a plurality of available lessons in selecting a lesson to be received.

#### POINT 1

The reason just given (ie, that following "for the purpose of . . .") is no different from the modification ("providing a list of lessons . . .") which was done to Siefert. Thus, circular reasoning is being employed.

That is, the PTO makes two assertions.

**One:** that Siefert should be modified by adding a list of lessons from which the user can select a lesson.

**Two:** the list is provided "for the purpose of allowing the user to choose from a plurality of available lessons in selecting a lesson to be received."

But the two assertions contain almost identical conceptual content, namely, add a list to Siefert from which the user can select something. Consequently, the two statements are actually a single statement.

Thus, the PTO is, in essence, relying on a single statement.

This statement does not qualify as a teaching under section

09/702,318  
Art Unit 3712  
Docket 9028

103. The statement merely asserts that Ziv-El's type of "list" should be added to Siefert, to allow students to select lessons from the list. That is not a teaching under section 103. Instead, that merely asserts that Siefert should be modified in a certain way.

#### POINT 2

The PTO's statement does not qualify as a teaching for another reason. The goal of the statement is to allow the user to select lessons from a list. But, by the Office Action's own admission (bottom of page 3 - top of page 4), Ziv-El himself allows that selection process.

Thus, if the goal to be attained is selecting lessons from a list, then Ziv-El **by himself** attains that goal. There is no reason to add Siefert.

The goal (of selecting lessons from a list) does not logically lead to the combination of Siefert and Ziv-El. The latter, **by himself**, achieves the goal.

Therefore, the stated goal for combining the references does not actually lead to a combination of references. Ziv-El, by himself, attains the goal.

#### **No Teaching for Combining "Icons" with References**

The Office Action, page 4, lines 5 - 7, takes Official Notice



09/702,318  
Art Unit 3712  
Docket 9028

that "icons" are "widely known." However, no teaching has been given for combining those icons with the references. A teaching is required.

Applicant points out that the device of Official Notice merely removes the necessity of showing the icons (1) in a printed publication or (2) in another medium allowed by section 102.

But the device of Official Notice does not remove the need for a teaching for combining the icons with the other references. A teaching is required, and none has been given.

#### **Type of "Icons" Recited not Shown in Prior Art**

The Office Action (page 4, lines 5 - 7) asserts that icons are well known for choosing options on a computer. However, claim 1 does not recite that. Claim 1(c) recites:

c) based on the assessment, identifying lessons available to the person and displaying corresponding icons on the display;

That is, claim 1(c) states that the "icons" displayed correspond to the "lessons" "identified" in the "assessment." That "assessment" made a judgement on the student's educational standing.

"Icons" having those characteristics have not been shown in the prior art.

From another perspective, at least two possibilities exist.

09/702,318  
Art Unit 3712  
Docket 9028

One is that an icon for every lesson available is displayed. Another is that only icons for a subset of those lessons is displayed. The PTO has not shown a teaching for the latter type of icons.

Nor has the PTO shown a teaching for the more detailed type of icons recited in claim 1(c).

For the preceding reasons, it is believed that the rejection of claim 1 should be withdrawn.

#### **Claim 2**

No reasons have been given for rejecting claim 2. Thus, the claim should be allowed.

#### **Claim 3**

The subject matter of claim 3 has not been shown in the prior art. Claim 3 recites:

3. Method according to claim 1, wherein the educational standing is measured at least once **by reference to the path** taken by the student through materials available for examination.

The Specification, near its end, in "Additional Consideration" number 4, provides an example of the "path."

09/702,318  
Art Unit 3712  
Docket 9028

4. Assessment of the student's current status was discussed above. One element which can be used in the assessment can be a trace of the **student's path** through the materials presented by the professor. Such a trace is commonly called a "clickstream."

For example, if a student in a Chemistry course repeatedly returns to a lesson which explains the concept of Avogadro's number, it may be assumed that the student is weak in that concept, and that remedial teaching is required in that, or a related, topic.

The Office Action, page 4, lines 7 - 9, asserts that Siefert, column 9, line 23, to column 10, line 63, shows the recitation in question. (That's almost two columns.)

The undersigned attorney has examined that part of Siefert, and fails to find the subject matter of claim 3 therein.

The undersigned attorney points out that he wrote the Specification in Siefert, and he recalls no subject matter in Siefert which corresponds to claim 3, above.

For example, claim 3, together with its parent, states that

- materials are made available to a student,
- the student examines some, or all, of the materials,
- a "path" is derived from observing the student's traversal of the materials, and
- "the educational standing is measured at least once **by reference to the path.**"

09/702,318  
Art Unit 3712  
Docket 9028

The undersigned attorney cannot find those processes in Siefert.

In addition, according to 35 USC § 103, claim 3 must be read as-a-whole: the parent claim must be included. Under such a reading, the "educational standing" is measured "by reference to the path." Consequently, the "list of lessons available" which is selected will depend on the "path." That has not been shown in Siefert.

Further, the "icons" "corresponding" to the "list of lessons" will also depend on the "path." That has not been shown in Siefert.

Further, still, the new lessons which are made available to the student, and from which the student may select lessons, will also depend on the "path." That has not been shown in Siefert.

The subject matter of claim 3 has not been shown in the prior art. Thus, the rejection fails to comply with MPEP § 2143.03, cited above.

37 CFR § 1.104(c)(2) states:

. . . the Examiner must cite the best references at his . . . command.

When a reference is complex or shows or describes inventions other than that claimed by the applicant, **the particular part relied on must be designated as nearly as practicable.**

The pertinence of each reference, if not

apparent, must be clearly explained and each rejected claim specified.

Appellant submits that the Office Action fails to comply with this regulation.

To support this conclusion, Appellant points out that the Office Action relies on almost two full columns of Siefert to show claim 3 (which contains about 28 words). Those columns of Siefert contain discussions on the following topics, and features, of the Siefert's invention:

-- Availability of resources which discuss different teaching methods used for different students having different learning behaviors. (Column 9, lines 24 - 36.)

-- Under Siefert's invention, measuring the rate of learning of a student during a lesson, and urging the student to end the lesson when the rate begins to falter. (Column 9, lines 37 - 50.)

-- A definition of the elements which are found in a particular form of the invention. (Column 9, line 51 - column 10, line 1.)

-- Students can maintain discussions with each other, and with a teacher, using video conferencing. (Column 10, lines 2 - 7.)

-- A participant can interact with Siefert's invention at numerous different geographical locations, at different times. For example, a person can learn how to fill out a certain form at one location, and then fill out the form itself at another. (Column 10, lines 8 - 25.)

-- Three examples of different styles of learning found in students. (Column 10, lines 26 - 43.)

-- Developing a "profile" of a student. The usual name-age data is obtained, together with previous learning accomplished. The student's preferred style of learning is ascertained, and one approach is given for doing that. (Column 10, lines 46 - 64.)

Appellant points out that the issue-at-hand is whether the nearly-two-columns of Siefert, just summarized, show the "path" of claim 3. Appellant submits that the summary just given shows no such "path." Consequently, the Office Action fails to comply with 37 CFR § 1.104(c)(2), in failing to show precisely where the "path" of claim 3, and its claimed usage, is found in Siefert.

**Claims 4 and 5**

Claims 4 and 5 are considered patentable, based on their parents.

**Claim 14**

The Office Action includes claim 14 in its discussion of claims 1 - 5, 7, and 10, but does not list claim 14 at the beginning of that discussion. (See page 4, line 11, and page 3, line 14.)

Claim 14 recites:

14. A system, comprising:

- a) storage means for storing educational lessons, in computer-readable format, each lesson comprising at least one sequence of video frames;
- b) server means, having access to the storage means;
- c) first software means, running on the server means, for transferring a data packet to a remote computer,
  - i) said data packet containing a set of lesson-icons, each of which, when actuated, delivers signals to the server means, causing the server means to retrieve a respective lesson from the storage means, and transmit the lesson to the remote computer, and
  - ii) said first software means utilizing a public-access, packet-switched network to transfer the packet;

09/702,318  
Art Unit 3712  
Docket 9028

d) second software means, running on the server means, for determining whether a person participating in a lesson at the remote computer has achieved a predetermined educational background and, if so, transferring additional lesson-icons, which induce transfer of additional lessons.

These claim elements have not been shown in the prior art, contrary to MPEP § 2143.03. The sole discussion in the Office Action is found on page 4, which states:

Ziv-El discloses . . . that the network used to transmit information comprises a packet-switching communication protocol,

and which then continues to assert that it is obvious to add packet switching to Siefert.

That rejection is insufficient under the MPEP section in question.

In addition, the rationale for adding packet switching to Siefert is insufficient as a teaching under section 103. The rationale is a naked conclusion, stating that it is obvious to add packet switching to Siefert. That is not a teaching under section 103.

#### **Claim 7**

Claim 7 recites:



09/702,318  
Art Unit 3712  
Docket 9028

7. Method according to claim 1, wherein some courses on the list are represented by icons, but selection of such icons causes no display of a corresponding lesson.

POINT 1

The PTO takes Official Notice that active and inactive icons are well known in computer games. The undersigned attorney previously traversed this Official Notice, and requested a citation of evidence showing such icons. (See MPEP § 2144.03.) In apparent response to this request, the PTO previously submitted an AFFIDAVIT showing icons in video games.

However, in Appellant's Amendment previous to the Appeal Brief, page 9, (mailed November 12, 2002), Appellant gave one reason for the traverse, and for the request for the citation of evidence:

One reason is that no relevance is seen between video games and the claimed invention.

To date, no relevance has been shown between the claimed invention and video games. Therefore, Appellant submits that the video-game-icons are non-analogous art.

Thus, the Noticed subject matter cannot be used.

POINT 2

In addition, a logical flaw seems to exist in the PTO's

09/702,318  
Art Unit 3712  
Docket 9028

position. Inactive icons in video games were Officially Noticed, and their existence later supported by an AFFIDAVIT. However, those Noticed icons represent situations which may occur, or be available, in the future to a game player. Consistent with this, the first Office Action states:

. . . certain advanced scenarios [which] are not available for selection until certain tasks are performed.

(First Office Action, page 4, top.)

Now, the present Office Action asserts that, regarding the invention, inactive icons representing lessons would be obvious, to represent lessons which may be available in the future.

Thus, the Office Action makes an analogy between

- 1) future scenarios in video games
- and
- 2) future lessons under the invention.

However, Appellant submits that any such analogy is prompted by Appellant's own disclosure, which is prohibited. One reason is that **other icons exist** in video games, in addition to icons representing future scenarios. Those icons are clearly irrelevant.

-- For example, when a player kills invading aliens, don't they sometimes turn "grey," ie, inactive ?

-- As another example, in a pinball-type

game, don't certain icons remain inactive until an adjacent target-icon is struck by the ball ? Then, the previously inactive icons become active, and will now issue points if struck.

-- As a third example, in a shooting-type game, don't some icons remain inactive until random times, at which they begin to attack the player ?

Other examples certainly exist of icons which are inactive, but do not represent future scenarios.

Therefore, of all the possible inactive, or "greyed out," icons present in video games, the PTO has chosen to rely on "future scenario" icons. Appellant suggests that a teaching is required for arbitrarily Noticing the "future scenarios icon" supposedly found in video games, to the exclusion of the other three just postulated.

If no teaching is given, then it is reasonable to assume that Appellant's own disclosure is being used as the teaching.

### POINT 3

Point 2 can be viewed from a different perspective. The Third Example is repeated here:

-- As a third example, in a shooting-type

09/702,318  
Art Unit 3712  
Docket 9028

game, don't some icons remain inactive until  
random times, at which they begin to attack  
the player ?

Applicant points out that, if those types of icons are  
combined with the other references, then Applicant's invention is  
certainly **NOT** obtained.

Consequently, a teaching is required for (1) ignoring such  
icons, and (2) selecting icons which the PTO thinks produce  
Applicant's invention.

#### POINT 4

In addition, even if the PTO's Noticed grey icons are  
accepted, no teaching has been given for combining that type of  
icon with Siefert and Ziv-El, as opposed to the three types of icon  
just enumerated.

In addition, Applicants repeat that Official Notice is a tool  
to eliminate finding the Noticed subject matter in a printed  
publication, for example. Official Notice does not eliminate a  
need for a teaching for combining the Noticed subject matter with  
the other two references.

No teaching has been given.

#### Claim 8

#### POINT 1

09/702,318  
Art Unit 3712  
Docket 9028

No clear rejection of claim 8 has been issued. The Office Action, page 3, states that claims 1 - 5, 7, and 10 are rejected as obvious, based on Siefert and Ziv-El. Claim 8 is not listed. It is not clear whether the rejection is under section 102 or 103.

#### POINT 2

Beginning at the bottom of page 4, the Office Action relies on a passage in Siefert to show **part of** claim 8. Thus, the rejection of claim 8 is incomplete.

The presence of **part of** claim 8 in a passage in Siefert is insufficient to support a rejection, either under section 102 or 103.

#### POINT 3

Claim 8(d)(i) has not been shown in Siefert, and the passage in Siefert used by the PTO shows the opposite. This will be explained.

Claim 8 recites:

8. A system, comprising:
  - a) a computer system, which includes presentation means for presenting audio-visual information to students;
  - b) multiple, different courses, stored in the computer system, each comprising a collection of lessons;

c) for each student in a group, a student data model, which contains information describing the student's educational status;

d) for each course, a course structure file, which indicates

i) which lessons in the course can be taken by the student without restriction, and

ii) which lessons require prerequisite courses be taken first;

e) framework software means which

i) identifies a student,

ii) examines (1) that student's data model and (2) the course structure, and,

iii) based on the examination, makes a determination of options to display to the student, and

iv) displays the options.

The Office Action, page 4, bottom, to page 5, top, asserts that Siefert, column 9, lines 1 - 5, shows the claimed "course structure file" of claim 8(d). However, that claim section recites:

d) for each course, a course structure file, which indicates

i) which lessons in the course can be taken by the student without restriction, and

ii) which lessons require

prerequisite courses be taken first.

Stated simple, this claim language states that

- some courses have no restrictions,
- and
- some courses need prerequisites (ie, have restrictions).

The cited section of Siefert, in referring to presenting lesson 13 after lessons 1 - 12, may indicate prerequisites, as in claim 8(d)(ii). However, claim 8(d)(i) has not been shown in Siefert.

Claim 8(d)(i) states that the "course structure file" indicates which lessons "can be taken by the student **without restriction.**"

In fact, the cited passage of Siefert is opposite to the "without restriction" recitation. Siefert states that lesson 13 must follow lesson 12. Thus, lesson 12 is a prerequisite for lesson 13. Siefert clearly does not show the "without restriction" element of claim 8(d)(i). Siefert is opposite because requiring lesson 13 to follow lesson 12 is **NOT** "without restriction."

Therefore, claim 8 states that some courses can be taken **without restriction.** The cited passage in Siefert only shows restrictions. Siefert does not show claim 8.

POINT 4

Claim 8(e) recites:

- e) framework software means which
  - i) identifies a student,
  - ii) examines (1) that student's data model and (2) the course structure, and,
  - iii) based on the examination, makes a determination of options to display to the student, and
  - iv) displays the options.

The PTO has not identified

- 1) the "options,"
- nor
- 2) the combined processes of claim 8(e)(ii) and (iii) in the applied references.

Claim 8 has not been shown in the prior art.

**Claim 10**

Claim 10 recites:

- 10. A method, comprising:
  - a) identifying a person viewing a display;
  - b) presenting, on the display, a collection of icons, each of which causes a lesson to be presented when actuated; and



c) evaluating whether the person has attained predetermined prerequisites and, if so, presenting additional icons on the display.

No clear rejection of claim 10 has been issued. The Office Action, page 3, states that claims 1 - 5, 7, and 10 are rejected as obvious, based on Siefert and Ziv-El. On page 5, line 3 et seq., the Office Action relies on Official Notice to show "icons" as in claim 10.

But claim 10 recites more than icons.

The Office Action has failed to show all the elements of claim 10 in the prior art.

Further, no teaching has been given for combining the Noticed subject matter with the other references.

As to claim 10(c), it may be true that, in a video game, when a player achieves certain attainments, additional icons may appear on the display. For example, when the player kills 100 Invading Cyborgs, icons representing additional weapons may be added to the display.

However, the claim must be read as-a-whole. Section 103 requires that. The "icons" of claim 10(c) clearly represent new lessons. When those icons are actuated, the new lessons are presented, as in claim 10(b).

The PTO has presented no reasoning why the art of video games should be applied to computer-based education. In fact, the two

09/702,318  
Art Unit 3712  
Docket 9028

are clearly non-analogous.

-- One is a frivolous waste of time, although perhaps amusing.

-- The other is a serious pursuit, necessary and desirable in any society.

#### Official Notice

Applicant previously traversed (see Appeal Brief, page 42, mailed August 28, 2003) the Official Notice that, in video games, certain icons are added upon achievement of certain tasks. Applicant requested a citation of evidence showing such icons. (See MPEP § 2144.03.)

#### POINT 1

One reason for the traversal is that the Notice relies on video games. Appellant fails to see relevance of video games to the present invention.

In addition, no teaching has been given for adding the video-game icons to Siefert and Ziv-El. For example, the Official Notice relies on a hypothetical video game which displays a special icon making available an advanced level of play, when a player scores a threshold number of points. Even if such video games exist, no teaching has been given for combining that approach with Siefert and Ziv-El.

In fact, it would seem that video games represent non-analogous art. One reason is that video games are played repeatedly, in order to attain the higher levels of mastery suggested by the PTO.

But the "mastery" amounts to enhancing eye-hand coordination, or establishing of reflexes by repeated conditioning.

Applicants submit that this type of repetition is not found in educational pursuits, nor is it relevant to educational pursuits. To support this conclusion, Applicant points to what is believed to be a well known fact. A student applying to MIT may state, in listing his accomplishments, that he achieved Grand Master status in some type of video game. Applicant submits that, not only would that statement not assist the student in gaining admission, but that such a statement may result in denial of the student's application.

## POINT 2

A second reason is that, in educational pursuits, some courses are required as pre-requisites for others. The undersigned attorney is unaware of video games which are pre-requisites for others, although he is no expert in the field of video games.

Thus, no substantiation of the Noticed subject matter has been given, as required by the MPEP.

**Claims 11 and 12**

SUMMARY OF RESPONSE: Parry states that when a student masters a concept, then that concept is removed from study. The PTO asserts that this implies removal of a corresponding icon.

However, the PTO has not shown icons in Parry in the first place. Thus, no basis exists for the implication that Parry shows removal of icons.

Another problem is that the PTO pre-supposes that Parry shows an icon for each concept. Applicant submits that this makes no sense (even if Parry showed icons).

For example, if Parry showed icons, the icons would correspond to, say, chapters. But if a student mastered a concept in a chapter, it makes no sense to remove the icon for the chapter. Why does mastery of a concept in a chapter imply mastery of the entire chapter ?

The claim element of removing icons from a display will be addressed. (For example, if the student completes certain pre-requisite courses, icons for those courses are removed from the display.)

The Office Action (page 5) relies on Parry alone to show this recitation, and admits that Parry does not actually show it. The Office Action asserts that Parry **implies** this icon-removal.

Parry does not.

Parry discusses a system which presents review material to students. The system tests the students for mastery of the

09/702,318  
Art Unit 3712  
Docket 9028

material. If mastery is demonstrated, then "concepts" mastered are "removed from study." (Column 3, top.)

The PTO argues that this implies removal of icons.

However, at least two problems arise here. One is that the PTO has not shown that Parry shows any icons in the first place. If he does not show icons, then how can he imply removal of them ?

The second problem is that the PTO is presuming that an icon exists for every "concept" in Parry. That is clearly not reasonable. An example will illustrate this.

Assume a textbook. It contains a table of contents, which sets out chapters. If that textbook is used in Applicant's system, icons may be used which correspond to the chapters.

But each chapter plainly contains multiple concepts. If, as in Parry, a student masters a "concept," then Parry "removes" that "concept" "from study." It makes no sense to assume that Parry then also removes the icon representing the chapter.

Doing so means that mastery of one concept implies mastery of an entire chapter. That makes no sense.

In addition, removal of the chapter-icon would remove access to the entire chapter. Why would you remove an entire chapter from view, after a student mastered a single "concept" ?

The purpose in Parry is **review**. How does removing access to a chapter assist review ?

09/702,318  
Art Unit 3712  
Docket 9028

Applicant submits that Parry, as a matter of common sense, cannot imply the icon-removal which the PTO attributes to Parry.

The absence of this single claim element is sufficient to invalidate the rejection.

#### **Claims 16 and 17**

Claims 16 and 17 were rejected as obvious, based on Siefert, Ziv-El, and Truluck. Claim 16 recites:

16. Method according to claim 1, and further comprising the steps of (1) detecting the arrival of predetermined periods in time and (2) during said periods, refraining from making lessons available to the display.

#### Point 1

Applicants submit that, even if the references are combined, claim 16 is not attained. One reason is that claim 16 recites "predetermined periods in time" and "refraining from making lessons available to the display" "during said periods."

Restated, during the "periods," no lessons are "available to the display." Thus, no students at all can see lessons, during the period. The Specification, page 11, provides examples explaining why such an arrangement can be useful. For instance, during mid-term examinations, all computer-lessons are prohibited, to all students.

According to the Office Action, Truluck shows this prohibition, because he shows a schedule of lessons for each student. The Office Action asserts that, since a student does not get a lesson-between-lessons, the "in-between" period of Truluck shows the prohibition of claim 16.

However, Truluck does not prohibit **ALL** lessons, he just says that a given student does not get lessons-between-lessons. But **OTHER** students may get lessons at that time.

From another point of view, even if Truluck is combined with the other two references, the prohibition of claim 16 is not attained. In Truluck, no lessons are presented during predetermined times, **BUT ONLY FOR THE STUDENT WHO DEFINES THOSE "DEAD" TIMES IN HIS OWN SCHEDULE.** But his "display" would still present lessons for **other students.**

Stated more simply:

-- Truluck states that, at certain times, a **given person** takes no lessons. But other persons can still take lessons at those times, and nothing in Truluck prevents that.

-- In contrast, claim 16 states that, at certain times, a **display** of the system receives no lessons. That is not what Truluck shows. His display could display lessons 24 hours per day, but to different students.

Stated yet more simply:

- The student's schedule in Truluck places limits on what the **student** receives.
- But it places no limits on what Truluck's system delivers to **other** students. Those other students could watch the display at all times, contrary to claim 16.

Point 2

It appears that the PTO is reading Truluck in an unjustified way. The PTO is apparently assuming that, once a student in Truluck sets up a schedule, that schedule is "cast in stone."

However, Truluck states that the schedule can change. (Column 5, lines 9 - 14.) Truluck also states that the student can change the schedule. (Column 6, lines 13 - 15.)

Therefore, the PTO asserts that Truluck's student sets up a schedule of classes. The PTO assumes that, between the classes, no computer-given classes will be attended by the student. The PTO treats those between-class periods as the "predetermined periods" of claim 16.

But claim 16 states "(2) during said periods, refraining from making lessons available to the display." If Truluck's student can change the schedule at-will, which he can, then the claimed "refraining" is not present.



The preceding applies to claims 17 and 18.

**Claim 17**

Dependant claim 17 states that "no lessons" are given during a certain period. Since Truluck states that some students can view lessons in the corresponding period, claim 17 is not found in Truluck.

**Claim 18**

Dependant claim 18 states that "no lessons" are given during a certain period. Since Truluck states that some students can view lessons in the corresponding period, claim 18 is not found in Truluck.

Parry does not change this. Parry merely removes some "concepts" "from study" for a given student. Applicant points out that, under claim 18, "lessons" are not made available during certain times.

"Lesson" corresponds to the same term in parent claim 12. The PTO has not shown how the "concepts" in Parry correspond to the "lessons" of claim 12.

And such a correspondence is dubious. Claim 12(c) recites:

c) ascertaining whether a student of the lessons has reached a predetermined level of education and, if so,

- i) presenting additional icons  
on the display; and
- ii) removing other icons from  
the display.

A student's mastery of Parry's "concepts" do not cause the "presenting" nor "removing" of claim 12(c).

No correspondence between the "concepts" of Parry and the "lessons" of parent claim 12 exists.

#### **Response to "Response to Arguments"**

This section will respond to the PTO's "Response to Arguments," which begins on page 8.

#### **Response to Page 8, First Paragraph**

Applicant previously pointed out two things: ONE, claim 1 recites two groups of lessons:

- 1) those on the "list" of claim 1(b), and
- 2) those "identified" in claim 1(c), and

TWO: the references do not show that.

The PTO now argues that two groups of lessons can be found in Siefert and Ziv-El, if combined (ie, one group from each reference.)

Applicant believes that the PTO never argued that before.

Further, no teaching has been given for combining the

references in order to attain two "groups." The Office Action's assertion that it can look to "Siefert as viewed in combination with Ziv-El" (page 8, line 5) is invalid.

A teaching is needed to view the two references together.

Response to Page 8, Third Paragraph

Claim 1 states that certain steps are taken based on the "assessment." Those steps are not present in the references. Thus, the claimed "assessment" is not found in the references.

It is axiomatic that the claim is read as-a-whole. The word "assessment" cannot be removed and read in isolation.

From another point of view, all elements of the claim must be found in the references, including the steps which result from, and are involved with, the "assessment." Showing an "assessment," narrowly defined, in a reference does not suffice to show the other steps.

Response to Page 9, Second Full Paragraph

This paragraph is now moot, because "greater autonomy" is no longer used by the PTO as a basis for combining references.

Response to Page 9, Third Full Paragraph

Applicant does not dispute the existence of icons. However, numerous types of icons exist. Not all types correspond to those

09/702,318  
Art Unit 3712  
Docket 9028

claimed.

For the PTO to combine prior-art icons (Officially Noticed or otherwise) with the other references, the PTO must show (1) a teaching for selecting the particular icons used and (2) a teaching for combining the selected icons with the other two references.

The PTO is apparently falling into a common trap. The PTO is apparently saying, "Anybody could add icons to a display," or "Everybody knows that icons can be used." But that is invalid as a rejection. MPEP § 2143.01 states:

FACT THAT REFERENCES **CAN BE** COMBINED OR  
MODIFIED IS NOT SUFFICIENT TO ESTABLISH PRIMA  
FACIE OBVIOUSNESS

The mere fact that references can be combined  
or modified does not render the resultant  
combination obvious unless the prior art also  
suggests the desirability of the combination.

. . . .

FACT THAT THE CLAIMED INVENTION IS WITHIN THE  
CAPABILITIES OF ONE OF ORDINARY SKILL IN THE  
ART IS NOT SUFFICIENT BY ITSELF TO ESTABLISH  
PRIMA FACIE OBVIOUSNESS

A statement that modifications of the prior  
art to meet the claimed invention would have  
been "well within the ordinary skill of the  
art at the time the claimed invention was  
made" because the references relied upon teach  
that all aspects of the claimed invention were  
individually known in the art is not  
sufficient to establish a prima facie case of  
obviousness without some objective reason to  
combine the teachings of the references.

Therefore, even assuming that the PTO is relying on a proposition such as "Everybody knows that icons can be used as claimed," this MPEP section states that such an assumption is insufficient as a basis for rejection.

Response to Page 10, First Full Paragraph

This Amendment addresses this paragraph at other locations.

Response to Page 11, Second Full Paragraph

This paragraph asserts that Applicant is arguing features not present in the claims. Applicant is not doing that.

Claim 16 recites, at certain times, "refraining from making lessons available **to the display**."

Truluck states that Lesson A may be withheld from Student 1. However, Student 2 can still use a "display" to see Lesson A.

Thus, Truluck **does not** refrain "from making lessons available **to the display**" as claimed.

From another point of view, Applicant pointed out how following the recitations set forth in the claims results in certain necessary modes of operation, or "features." That is not "arguing features not present in the claims." Those features and modes are **necessarily present**, or inherent, in the claim.


09/702,318  
Art Unit 3712  
Docket 9028

**Conclusion**

Applicant requests that the rejections to the claims be reconsidered and withdrawn.

Applicant expresses thanks to the Examiner for the careful consideration given to this case.

Respectfully submitted,

  
Gregory A. Welte  
Reg. No. 30,434

NCR Corporation  
1700 South Patterson Blvd.  
WHQ - 4W  
Dayton, OH 45479  
July 7, 2004

(937) 445 - 7663

WELTE DIRECT: (765) 296 - 4699

ATTACHMENT: Annotated Claim(s) Showing Amendments

ATTACHMENT: Annotated Claim(s) Showing Amendments

1. (Original) In a method of presenting educational lessons on a display, the improvement comprising:

- a) making an assessment of the educational standing of a person utilizing the display;
- b) selecting a list of lessons available;
- c) based on the assessment, identifying lessons available to the person and displaying corresponding icons on the display; and
- d) accepting selection of an icon from the person, and presenting the chosen lesson.

2. (Original) Method according to claim 1, wherein the educational standing is measured by number, type, or both number and type, of lessons completed.

3. (Currently amended) Method according to claim 1, wherein the student takes a path through materials available for examination and educational standing is measured at least once by reference to the path taken by the student through materials available for examination.

4. (Original) Method according to claim 1, wherein the step

09/702,318  
Art Unit 3712  
Docket 9028

of presenting a lesson comprises transmitting information over a network.

5. (Original) Method according to claim 4, wherein the network comprises a public-access, packet-switched network.

6. (Currently amended) In a method of presenting educational lessons on a display, the improvement comprising:

- a) making an assessment of the educational standing of a person utilizing the display;
- b) selecting a list of lessons available;
- c) based on the assessment, identifying lessons available to the person and displaying corresponding icons on the display; and
- d) accepting selection of an icon from the person, and presenting the chosen lesson;

~~Method according to claim 1,~~

wherein some courses on the list are not represented by icons.

7. (Original) Method according to claim 1, wherein some courses on the list are represented by icons, but selection of such icons causes no display of a corresponding lesson.

8. (Original) A system, comprising:



- a) a computer system, which includes presentation means for presenting audio-visual information to students;
- b) multiple, different courses, stored in the computer system, each comprising a collection of lessons;
- c) for each student in a group, a student data model, which contains information describing the student's educational status;
- d) for each course, a course structure file, which indicates
  - i) which lessons in the course can be taken by the student without restriction, and
  - ii) which lessons require prerequisite courses be taken first;
- e) framework software means which
  - i) identifies a student,
  - ii) examines (1) that student's data model and (2) the course structure, and,
  - iii) based on the examination, makes a determination of options to display to the student, and
  - iv) displays the options.

9. (Cancelled)

10. (Original) A method, comprising:

- a) identifying a person viewing a display;
- b) presenting, on the display, a collection of icons, each of which causes a lesson to be presented when actuated; and
- c) evaluating whether the person has attained predetermined prerequisites and, if so, presenting additional icons on the display.

11. (Original) Method according to claim 10, and further comprising:

- d) removing selected icons from the collection of icons, if the person has attained the predetermined prerequisites.

12. (Original) A method, comprising:

- a) presenting icons on a display;
- b) detecting actuation of an icon and, in response, presenting educational lessons on the display;
- c) ascertaining whether a student of the lessons has reached a predetermined level of education and, if so,
  - i) presenting additional icons on the display; and
  - ii) removing other icons from the display.

13. (Original) A system, comprising:

- a) means for presenting icons on a display;
- b) means for detecting selection of an icon and, in response, presenting educational lessons on the display;
- c) means for ascertaining whether a student of the lessons has reached a predetermined level of education and, if so,
  - i) presenting additional icons on the display; and
  - ii) removing other icons from the display.

14. (Original) A system, comprising:

- a) storage means for storing educational lessons, in computer-readable format, each lesson comprising at least one sequence of video frames;
- b) server means, having access to the storage means;
- c) first software means, running on the server means, for transferring a data packet to a remote computer,
  - i) said data packet containing a set of lesson-  
icons, each of which, when actuated, delivers  
signals to the server means, causing the  
server means to retrieve a respective lesson  
from the storage means, and transmit the  
lesson to the remote computer, and
  - ii) said first software means utilizing a public-

access, packet-switched network to transfer  
the packet;

d) second software means, running on the server means,  
for determining whether a person participating in a  
lesson at the remote computer has achieved a  
predetermined educational background and, if so,  
transferring additional lesson-icons, which induce  
transfer of additional lessons.

15. (Original) System according to claim 14, and further  
comprising

- e) a plurality of remote computers, each of which is  
operated by a different student, and
- f) a plurality of displays, one associated with each  
respective remote computer,
- i) each display of which presents a collection of  
icons representing courses available to the  
respective student, and
- ii) the content of each collection is determined  
by the first software means, or the second  
software means, or both.

16. (Original) Method according to claim 1, and further  
comprising the steps of (1) detecting the arrival of predetermined

09/702,318  
Art Unit 3712  
Docket 9028

periods in time and (2) during said periods, refraining from making lessons available to the display.

17. (Original) Method according to claim 10, and further comprising the steps of (1) detecting the arrival of predetermined periods in time and (2) during said periods, refraining from making lessons available to the display.

18. (Original) Method according to claim 12, and further comprising the steps of (1) detecting the arrival of predetermined periods in time and (2) during said periods, refraining from making lessons available to the display.